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Instruments

APR 0 3 2013

510(k) Summary

1. Contact Details

Stryker Instruments 4100 E. Milham Avenue Kalamazoo, MI 49001 (p) 269-323-7700 (f) 269-389-5412

Christina McKee Christina.McKee@Stryker.com

December 7, 2012

2. Device Name

Trade Name: Stryker® iVAS Balloon Catheter

Common Name: Inflatable Bone Tamp

Classification Name:

Arthroscope

Cement, Bone, Vertebroplasty

Regulation Number:

§888.1100

§888.3027

3. Legally Marketed Predicate Device(s)

510(k) Number	Product Code	Trade Name	Manufacturer
K113477	HRX	Stryker® iVAS Balloon	Stryker Instruments
	NDN	Catheter	_
K103807	HRX	Stryker® iVAS Balloon	Stryker Instruments
	NDN	Catheter	
K093419	HRX	Stryker® iVAS Balloon	Stryker Instruments
	NDN	Catheter	

K110998	HRX	AFFIRM™ VCF System	Algea Therapies
	NDN ·		
K041454	HRX	Xpander Inflatable Bone	Kyphon Inc.
		Tamps	

4. <u>Device Description</u>

The Stryker® iVAS balloon catheter is a bone tamp with an inflatable component (balloon) at the distal end. The balloon is inflated to create a void within the vertebral body.

5. Intended Use/Indications for use

The Stryker® iVAS Inflatable Vertebral Augmentation System (system) is intended to be used for the reduction of fractures and/or creation of a void in cancellous bone in the spine. This includes use during percutaneous vertebral augmentation with Cortoss ® and cleared spinal Polymethylmethacrylate (PMMA) bone cements indicated for use during percutaneous vertebral augmentation procedures, such as kyphoplasty. Vertebral Compression fractures may result from osteoporosis, benign lesions and/or malignant lesions such as metastatic cancer and myeloma.

6. Substantial Equivalence Comparison

Stryker® iVAS	Stryker® iVAS	AFFIRM™ VCF	Xpander	Comparison
Balloon Catheter	Balloon Catheter	System	Inflatable	
	(Predicates)		Bone Tamps	
	Indications for Us	e		
The Stryker® iVAS	The Stryker iVAS	The AFFIRM™ VCF	KyphX®	All products are
Inflatable Vertebral	Inflatable Vertebral	System is intended to	Inflatable Bone	indicated for the
Augmentation System	Augmentation	be used for the	Tamps are	reduction of
(system) is intended to	System (system) is	reduction and fixation	intended to be	fractures and/or
be used for the	intended to be used for	of fractures and/or	used as	creation of a void in
reduction of fractures	the reduction of	creation of a void in	conventional	cancellous bone.
and/or creation of a	fractures and/or	cancellous bone in the	bone tamps for	Kyphon Xpander is
void in cancellous	creation of a void in	spine, hand, tibia,	the reduction of	indicated for
bone in the spine. This	cancellous bone in the	radius, and calcaneus.	fractures and/or	kyphoplasty while
includes use during	spine. This includes use	This includes	creation of a	Stryker® iVAS's
percutaneous vertebral	during percutaneous	percutaneous vertebral	void in	indications call out
augmentation with	vertebral augmentation.	augmentation. Vertebral	cancellous bone	percutaneous
Cortoss ® and cleared	The system is to be	Compression fractures	in the spine	vertebral
spinal	used with cleared spinal	may result from	(including use	augmentation.
Polymethylmethacrylat	Polymethylmethacrylat	osteoporosis, benign	during balloon	Percutaneous
e (PMMA) bone	e (PMMA) bone	lesions and/or	kyphoplasty with	vertebral
cements indicated for	cements and Cortoss®	malignant lesions such	KyphX® HV-	augmentation is a
use during	Bone Augmentation	as metastatic cancer and	RTM Bone	generic term and
percutaneous vertebral	Material indicated for	myeloma. The system	Cement), hand,	includes

augmentation	use during percutaneous	is to be used with	tibia, radius and	Kyphoplasty which
procedures, such as	vertebral augmentation	cleared spinal	calcaneus.	is a type of
kyphoplasty.	procedures, such as	Polymethylmethacrylat		percutaneous
Vertebral Compression	kyphoplasty.	e (PMMA) bone		. vertebral
fractures may result		cements indicated for		augmentation.
from osteoporosis,		use during percutaneous		The Stryker® iVAS
benign lesions and/or		vertebral augmentation,		Inflatable Vertebral
malignant lesions such		such as kyphoplasty.		Augmentation
as metastatic cancer				System and the
and myeloma.		1		AFFIRM™ VCF
				System indications
	•			for use include a
i				statement that
				Vertebral
1	<u> </u>			Compression
				fractures may result
				from osteoporosis,
				benign lesions
		•		and/or malignant
	;	·		lesions such as
				metastatic cancer
,			<u> </u>	and myeloma.

7. Non-clinical Testing

The Stryker® iVAS balloon catheter meets the specification and performance characteristics and are substantially equivalent to the predicate devices. Testing was completed in the previous 510k submissions (K113477, K103807 and K093419) and is reflective of the substantial equivalence to the predicate devices. Bench testing was performed for the removal of the contraindication "Fractures in which more than 68% of vertebral height is lost."

8. Clinical Testing

No clinical testing was deemed necessary for this submission.

9. Conclusions

The Stryker® iVAS balloon catheter is substantially equivalent in intended use, technological characteristics, safety, and effectiveness to the Stryker® iVAS Balloon Catheter, the AFFIRM™ VCF System and the Kyphx Xpander Inflatable Bone Tamp. The products have the same fundamental scientific technology, basic design, functional characteristics and the same clinical applications. The Stryker® iVAS balloon catheter does not raise any new safety and efficacy concerns when compared to similar devices already legally marketed. Therefore, the Stryker® iVAS balloon catheter is equivalent to the existing predicate devices.



Food and Drug Administration 10903 New Hampshire Avenue Document Control Center – W066-G609 Silver Spring, MD 20993-0002

Letter dated: April 3, 2013

Stryker Corporation % Ms. Christina McKee Regulatory Affairs Associate Analyst 4100 East Milham Avenue Kalamazoo, Michigan 49001

Re: K123942

Trade Name: Stryker Inflatable Vertebral Augmentation System (iVAS)

Regulation Number: 21 CFR 888.3027

Regulation Name: Polymethylmethacrylate (PMMA) bone cement

Regulatory Class: Class II Product Code: NDN, HRX Dated: February 27, 2013 Received: February 28, 2013

Dear Ms. McKee:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you; however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set

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forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

Mark N Melkerson -S

Mark N. Melkerson
Director
Division of Orthopedic Devices
Office of Device Evaluation
Center for Devices and
Radiological Health

Enclosure

510(K) Number (if known):	·	
Device Name: Stryker Inflatable	e Vertebral Augmentation	System (iVAS)
Indications for Use The Stryker® iVAS Inflatable Verused for the reduction of fracture. This includes use during percutaspinal Polymethylmethacrylate of percutaneous vertebral augment Compression fractures may respections such as metastatic candidate.	res and/or creation of a vo- taneous vertebral augment (PMMA) bone cements industrial ntation procedures, such a sult from osteoporosis, ben	id in cancellous bone in the spine. tation with Cortoss ® and cleared dicated for use during as kyphoplasty Vertebral
		· .
Prescription Use X	and/or	Over-The-Counter Use
(Part 21 CFR 801 Subpart D)		(21 CFR 801 Subpart C)
(PLEASE DO NOT WRITE E	BELOW THIS LINE-CONT NEEDED)	TINUE ON ANOTHER PAGE IF
Concurrence o	of CDRH, Office of Device	Evaluation (ODE)
Laurence D. Goyne - A		•
(Division Sign-Off) Division of Orthopedic Devices 510(k) Number: K 123942		